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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/413,821	10/07/1999	PHILIP KELLER	52352-356	2466

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EXAMINER	
ZISKIND, ANNA Y	

ART UNIT	PAPER NUMBER
2611	

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/413,821	KELLER, PHILIP	
	Examiner	Art Unit	
	Anna Ziskind	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 September 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, and 5-8 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6229466 (Gattani).

As to claims 1, 5, 6, and 7, Gattani teaches a method for calibrating the modulator of a transceiver that includes setting a DC level at the output of the transmission path that supplies a signal to twisted pair wiring (Fig. 4; Col. 1, lines 7-11; Col. 4, lines 33-46; Col. 6, lines 55-58; Col. 11, lines 20-56). The analog to digital converter (ADC) taught by Gattani effectively compares a value representing the DC level with a threshold in order to sample the analog signal and convert it to a digital value (Fig. 4, reference 402; Col. 12, lines 30-46). Finally, Gattani teaches controlling the output modulator to set the value representing the DV level to equal the result of the thresholding done by the ADC (Fig. 4, reference 306; Col. 11, lines 49-56).

As to claim 3, Gattani teaches controlling the output modulator for several voltage levels, any two of which can be considered a high power level and a low power level (Col. 7, lines 60-67; Table 1).

As to claim 8, Gattani teaches that the transceiver includes input circuitry for receiving an incoming signal (Col. 6, lines 51-58).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6229466 (Gattani) in view of US Patent 5890057 (Dutkiewicz et al.). Gattani doesn't teach that the output modulator is calibrated during initialization of the transceiver. Dutkiewicz teaches calibrating a modulator during initialization of the unit (Col. 1, lines 59-67). Therefore, it would have been obvious to one of ordinary skill in the art to carry out the calibration steps taught by Gattani during the initialization of the transceiver. Doing so would ensure that the transceiver is already calibrated once it begins normal operation.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6229466 (Gattani) in view of US Patent 6711138 (Pai et al.). Gattani doesn't teach that modulator is controlled to have the levels required by HPNA specification. Pai teaches the use of a physical layer device that conforms to HPNA specification (Col. 2, lines 30-33). Therefore, it would have been obvious to one ordinary skill in the art to use the levels prescribed by the HPNA specification when measuring the output of the modulator in the invention of Gattani. Doing so would ensure compatibility between the transceiver and other communicating entities in the network

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6229466 (Gattani). Gattani teaches a multiplexer that connects a controlled DC level signal to the ADC during a calibration mode of operation and connects outgoing data to the DAC during a normal mode of operation (Fig. 4, reference 406; Col. 11, lines 37-40; Col. 13, lines 8-16). However, Gattani doesn't teach that the input circuitry is connected to the DAC during a normal mode of operation. This is because Gattani teaches separate reception and transmission paths within the transceiver, as opposed to the instant invention, which has joint input/output terminals. The change from separate to joint input/output terminals is a design choice that does not change the function of the system. Therefore, it would have been obvious to one of ordinary skill in the art to combine the transmission and reception paths of the design of Gattani

into a single input/output terminal, thereby allowing the input circuitry [which would be connected to the transmission path] to be connected to the DAC. Doing so would decrease the size of the design by reusing the same hardware for both reception and transmission.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anna Ziskind whose telephone number is (571) 272-2769. The examiner can normally be reached on Mon. - Fri., 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anna Ziskind
Examiner
Art Unit 2611

CHIEH M. FAN
SUPERVISORY PATENT EXAMINER